

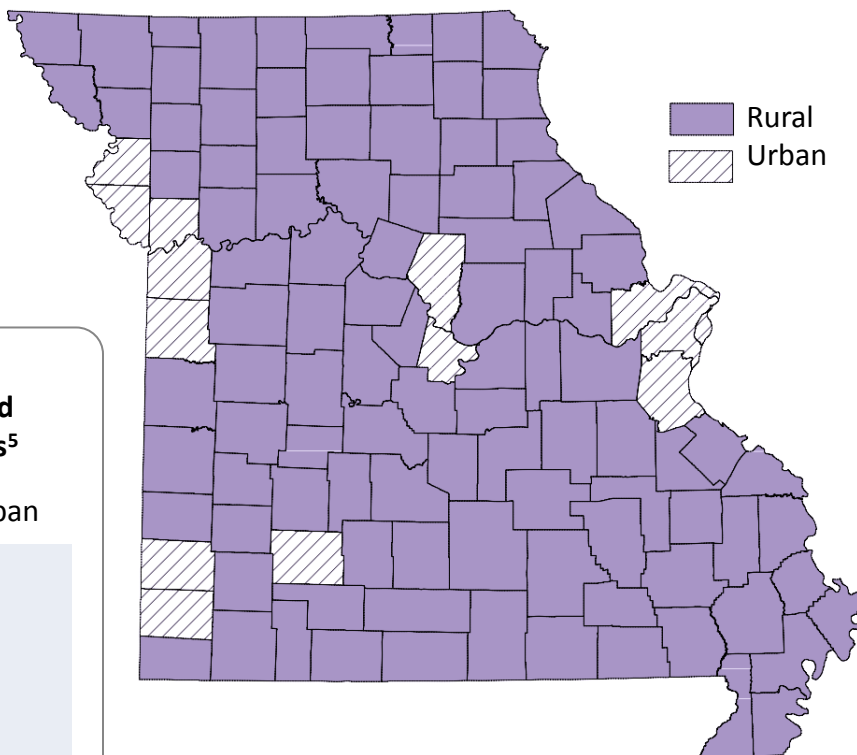


## Women's Health

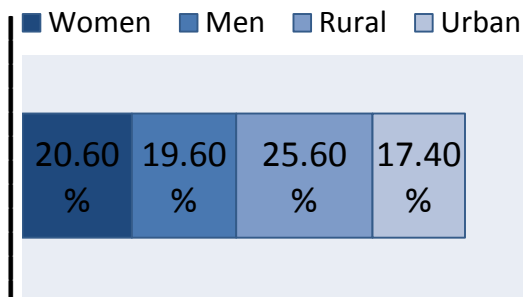
When examining the overall health of a population it is important to assess the unique needs of subsets of the population in an effort to comprehend and address the fundamental dynamics that may not be observable when looking at the population as a whole. The objective of this report is to assess the unique needs of one such subset, women living in rural Missouri, and to dichotomize urban and rural women as well as men and women in Missouri in order to provide meaningful context and comparisons. When evaluating standard indicators of health status, rural Missouri women are overall less healthy than both their male and urban female counterparts. In addition, women in Missouri have indicated that they feel they have a lower level of health status overall (Figure 1).

In general, women in rural Missouri face a variety of barriers related to their health. One of the central barriers is economic. Of the 101 counties in Missouri classified as rural (Figure 2), 82 have poverty rates above the state average. Additionally, the poverty rate for rural residents in 2011 (18.0) was 24.1% higher than the poverty rate for urban residents (14.5). Access to healthcare stands as another significant barrier for rural Missouri women. Of the 166 licensed Missouri hospitals, 76 are located in rural areas, and 35 of these are Critical Access Hospitals with a limited range of services. Additionally, 98 rural counties are Primary Medical Health Professional Shortage Areas (HPSAs).

**Figure 2. Rural/Urban County Classification<sup>6</sup>**



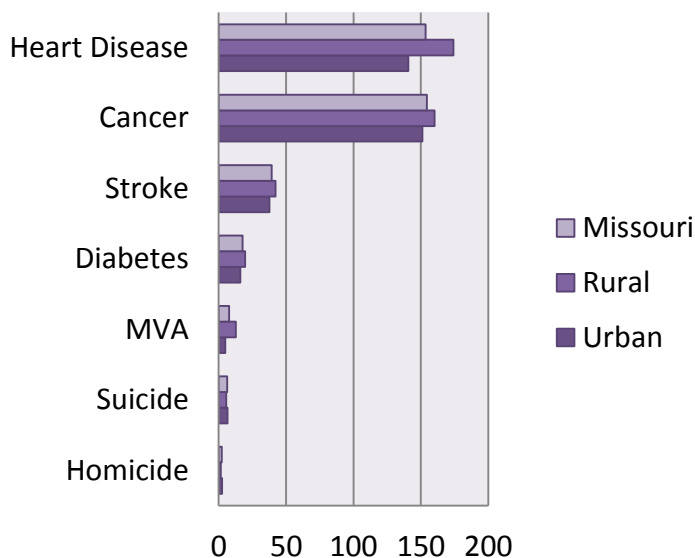
**Figure 1. Percent of Missourians Who Indicated They Felt They Had Fair or Poor General Health Status<sup>5</sup>**



## General Health Status

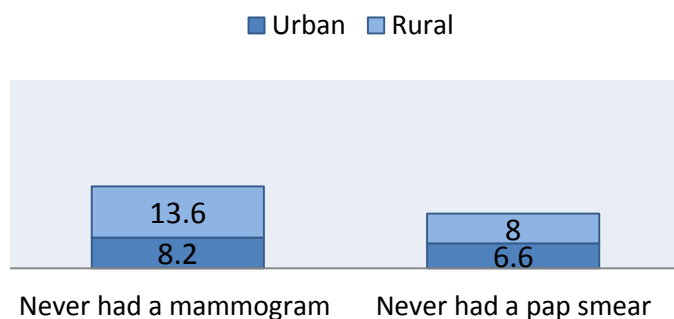
- Motor vehicle accidents (12.7 vs 4.9), stroke (42.1 vs 37.7), cancer (160.2 vs 151.2), and heart disease (174.2 vs 140.7) all have higher rates of death for rural females compared with urban (Figure 3).<sup>7</sup>
- The age-adjusted rate of preventable hospitalizations for rural Missouri females is 158.8 as compared with 124.9 for rural males and 144 for urban females per 10,000 residents. These rates continue to be significantly higher for rural women.<sup>7</sup>
- Emergency room visits in Missouri have a significantly higher age-adjusted rate for rural women (451.9) than rural men (343.5) and urban women (411.8) per 1,000 residents.<sup>7</sup>
- Women in rural Missouri have a higher percentage of never having a mammogram or pap smear as compared with urban Missourians. This is often due to lack of access and resources. Lack of health screenings can result in late detection and delay of diagnosis (Figure 4).<sup>5</sup>
- 21.8% of rural Missouri women report no leisure time physical activity as compared with 27.6% of urban women and 22.0% of men.<sup>5</sup>
- Figure 5 compares the percent of Missourians who have ever been told by a physician that they have one or more of the following conditions.<sup>5</sup>

**Figure 3. Causes of Death for Missouri Females of all Ages<sup>7</sup>**



Age-Adjusted Rates per 100,000 Residents

**Figure 4. Percent of Women in Missouri<sup>5</sup>**



**Figure 5. Percent of Missouri Subsets Who Have Been Told by a Physician They Have One or More of the Following Conditions<sup>5</sup>**

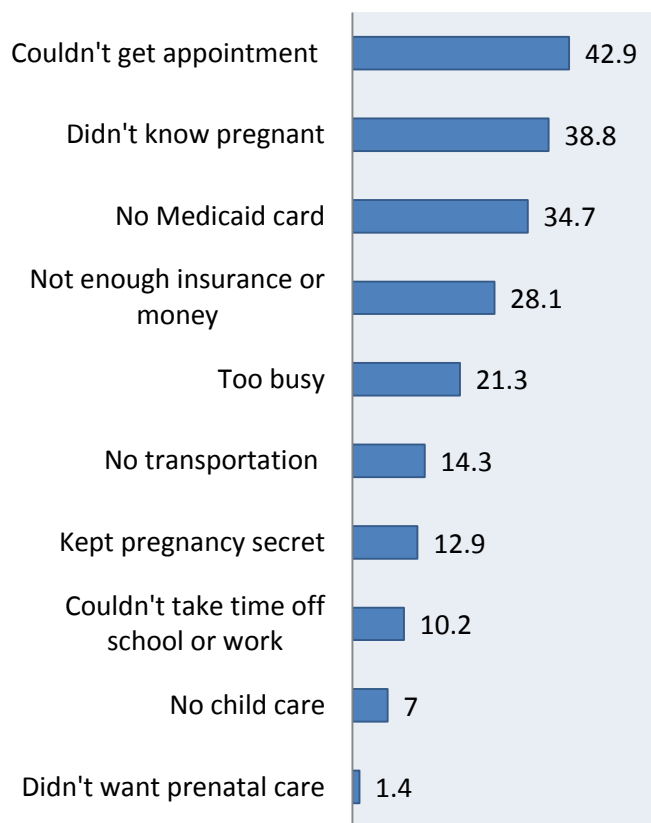
Medical Condition	Missouri Women %	Missouri Men %
Arthritis	32.7	25.8
Kidney Disease	2.9	2.1
Vision Impairment	19.6	17.4
Diabetes	10.6	10.8
Obese	30.1	30.1
Current Asthma	12.4	7.7

Medical Condition	Urban Women %	Rural Women %
Arthritis	27.5	35.2
Kidney Disease	2.5	2.8
Vision Impairment	18.2	21.0
Diabetes	10.0	12.4
Obese	29.1	33.1
Current Asthma	10.5	9.8

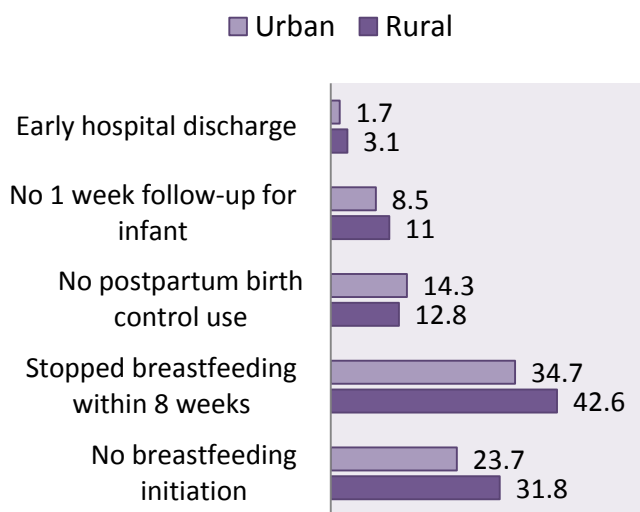
## Maternal Health

- Rural Missourians tend to have less access to postpartum health care (Figure 7).<sup>18</sup>
- 42.9% of Missouri females are unable to get an appointment when they want, resulting in late prenatal health care (Figure 6).<sup>18</sup>
- 1 in 5 Missouri mothers reported they did not receive prenatal care during the first trimester.<sup>18</sup> Lack of maternal health care can result in a higher risk of illness, add significant stress to pregnant women and raise the risk of delivering a low-birth weight baby by 3 times.<sup>16</sup>
- Women in rural Missouri have higher rates of pre-term birth (6.2) and low birthweight babies (1.1) per 100 residents, than urban mothers.<sup>7</sup>
- Rural women in Missouri have a higher rate of perinatal conditions overall compared with urban females per 100 residents. (6.6 vs 5.1).<sup>7</sup>
- Untreated inflammation in the mouth can lead to a higher risk of preterm labor. Almost half (43.5%) of all Missouri mothers did not see a dentist when they were pregnant, even though they felt they needed to.<sup>18</sup>

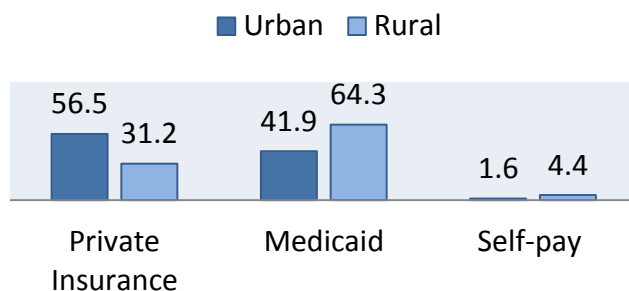
**Figure 6. Reported Reasons Missouri Females Started Prenatal Care Late (%)<sup>18</sup>**



**Figure 7. Percent of Missouri Females Who Reported a Lack of Health Care After Pregnancy<sup>18</sup>**



**Figure 8. Percent of Women with Medicaid or Self-pay for Pre-natal Care, Missouri<sup>7</sup>**

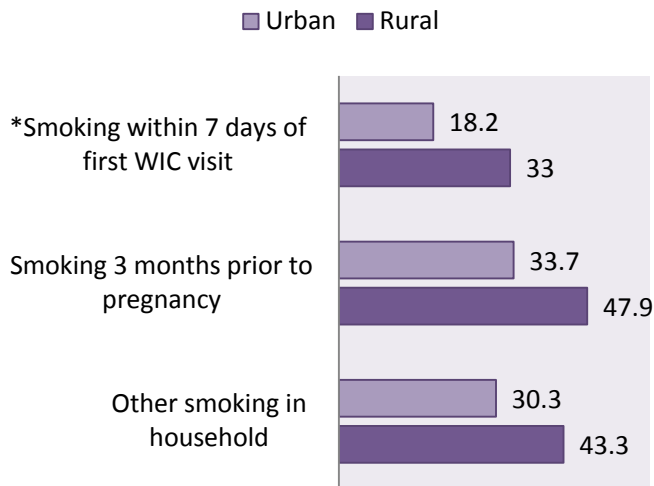


- The most common maternal stressors for Missouri women were; moving to a new address, having a close family member who is ill, and having bills they could not pay. During pregnancy, stress is passed from the mother to the developing fetus and can result in higher rates of obstetric complications, pre-term labor, and depression.<sup>18</sup>
- The percent of women in Missouri classified as having Medicaid or no insurance during pregnancy is higher in rural areas (Figure 8).<sup>7</sup>
- 30.1 WIC participants in rural areas are employed postpartum; 33.3 of urban participants are employed, at a rate per 100 residents. 45.5 rural WIC mothers are using food stamps postpartum; 44 of urban WIC mothers are using food stamps postpartum, at a rate per 100 residents of .<sup>7</sup>

## Tobacco & Alcohol Consumption while pregnant

- Tobacco use prior to pregnancy can cause decreased fertility and a reduction in conception. Tobacco use during pregnancy causes detrimental health defects in the fetus and may result in infant mortality and morbidity.<sup>18</sup>
- Per 100 Missouri residents, a rate of 33 low-income rural residents reportedly smoked during pregnancy as compared with 18.2 urban residents (Figure 9).<sup>7</sup>
- Rural Missouri has a higher prevalence of smoking during pregnancy than urban Missouri when comparing county rates (Figure 10).<sup>5</sup>
- In rural Missouri, 24.3% of women smoked during pregnancy; 3.8% smoked 1 or more packs per day. In urban Missouri, 13.7% of women smoked during pregnancy; 1.7% smoked 1 or more packs per day.<sup>4</sup>
- Drinking alcohol during pregnancy can cause a range of lifelong physical, intellectual and behavioral disabilities. There is not safe amount of alcohol use during pregnancy or while trying to get pregnant.
- Figure 11 details the reported percent of women who drank before and during pregnancy.<sup>18</sup>

**Figure 9. Rates of Women Smoking or Being Around Second Hand Smoke During Pregnancy, Missouri<sup>7</sup>**



Rates per 100 Residents

**Figure 10. Women Who Reported Smoking During Pregnancy<sup>5</sup>**

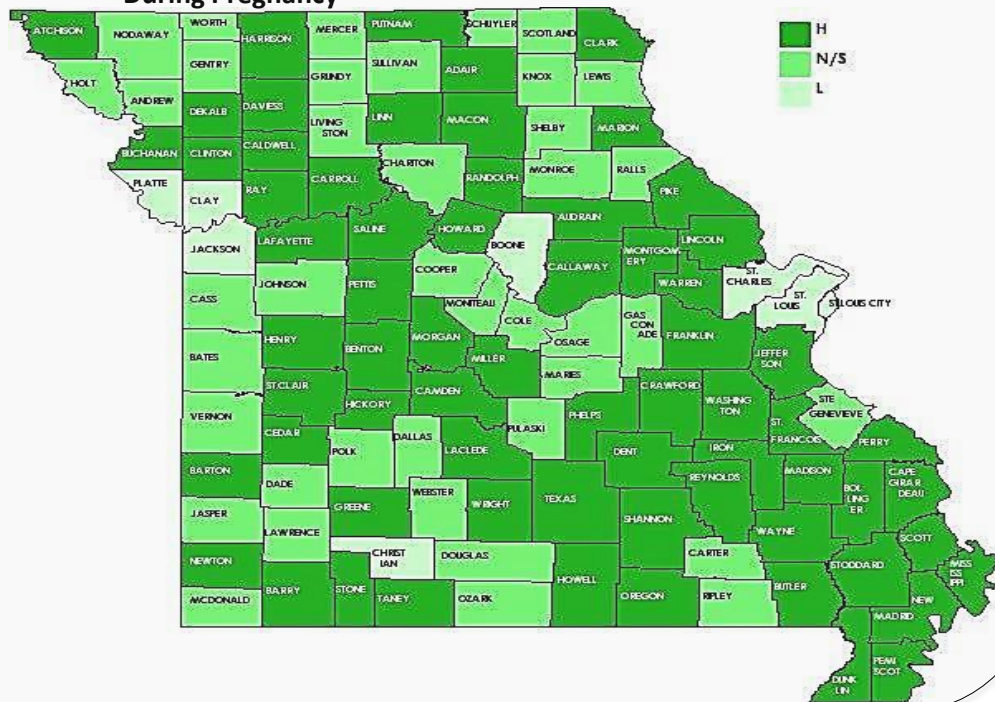


Figure 11. Rates for Missouri Females	Drank 3 months prior to pregnancy	Quit during pregnancy	Reduced drinking during pregnancy	Drank the same or more during pregnancy	Drank during the last 3 months of pregnancy
Percent	60.4%	55.0%	2.8%	2.6%	5.4%

\*Defined as smoking while pregnant

Intimate Partner Violence (IPV)

- IPV is physical, sexual, or psychological harm by a current or former partner or spouse.<sup>17</sup>
- The rate of partner abuse is higher for Missouri females in rural areas compared with both urban and state rates. All other categories of abuse against women had higher rates in urban Missouri (Figure 11).<sup>7</sup>
- Figure 12 displays the rate of domestic abuse crimes reported in Missouri in 2014.<sup>14</sup>
- Domestic violence reports in rural Missouri were the highest for Franklin, Christian, Taney, Scott and Audrain County (Figure 13).<sup>14</sup>
- IPV before and during pregnancy can lead to maternal and neonatal outcomes such as gestational diabetes, hypertension, placental problems, infections, and mood disorders.<sup>17</sup>
- The first abusive incident occurred during pregnancy for 30% of women.<sup>2</sup>
- 4.1% of women in Missouri reported IPV during the 12 months before they got pregnant.<sup>18</sup>
- 3.5% of women in Missouri reported IPV during their pregnancy in 2011.<sup>18</sup>

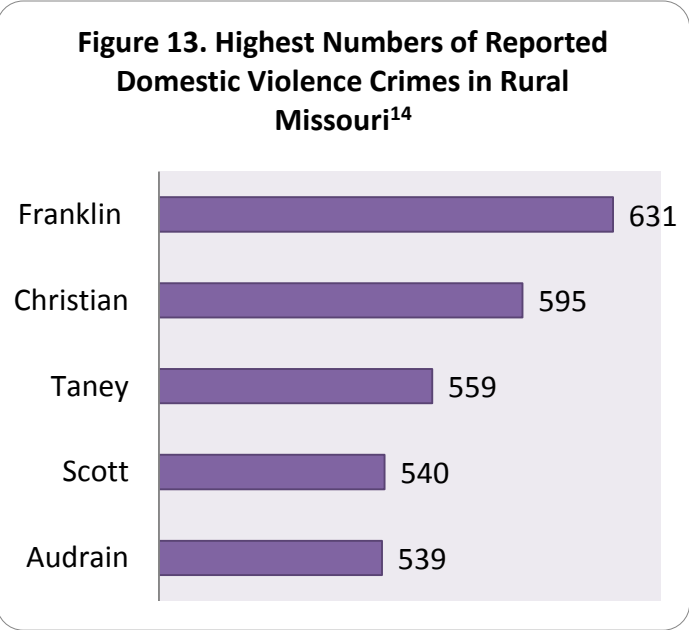
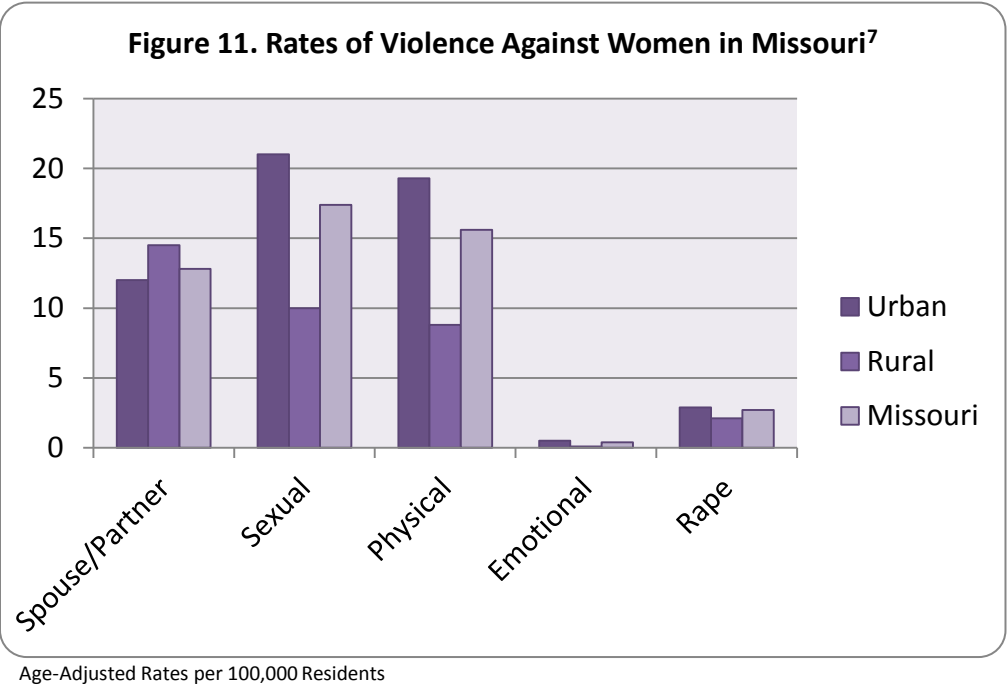


Figure 12. 2014 Missouri Crime Report <sup>14</sup>	Urban Rate	Rural Rate
Between Spouses	110.5	153.0
Between persons who have a child in common regardless of whether or not they have been married or resided together in the past	89.0	54.0
Between persons of continuing social relationship of romantic of intimate nature	140.3	98.4

Rates per 100,000 Residents

- Only 1 in 5 victims seek medical treatment for Intimate Partner Violence. Despite severe underreporting of IPV, half of all violent crime calls to the police department are IPV related.<sup>2</sup>

## Mental Health

- Common mental illnesses affecting women are anxiety, depression, eating disorders, and bipolar disorder.<sup>16</sup>
- 98 of the 101 rural counties in Missouri are mental Health Professional Shortage Areas (HPSA).<sup>6</sup>

## Suicide

- Suicide death rates are slightly higher in urban Missouri than rural (5.4 vs. 5.0) (Figure 14).<sup>6</sup>
- Between the years 2000-2011, the suicide rate in rural Missouri areas increased by 25% as compared with 10% in urban areas.<sup>6</sup>

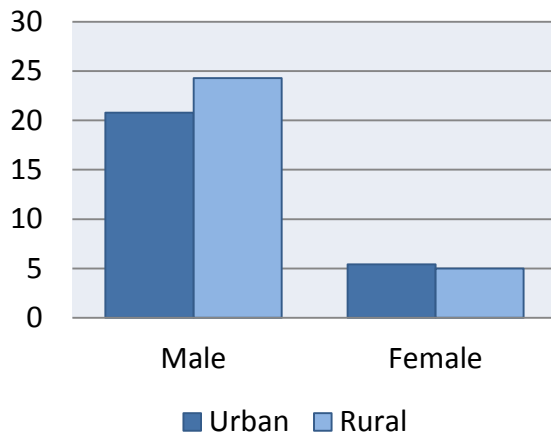
## Depression

- In 2013, 21.3% of Missourians suffered from a Depressive Disorder.<sup>4</sup>
- Women are twice as likely to suffer from depression than men.<sup>16</sup>

## Women and Mental Health

- Rural Missouri females have higher rates of mental illness than rural males and urban females; higher rates of both affective and anxiety disorders and lower alcohol and substance abuse related mental disorders (Figure 15).<sup>7</sup>
- Per 10,000 Age-adjusted residents, hospitalization rates for mental illness are 32.2 in rural Missouri, as

**Figure 14. Death Rates from Suicide Missouri, 2001-2011<sup>6</sup>**

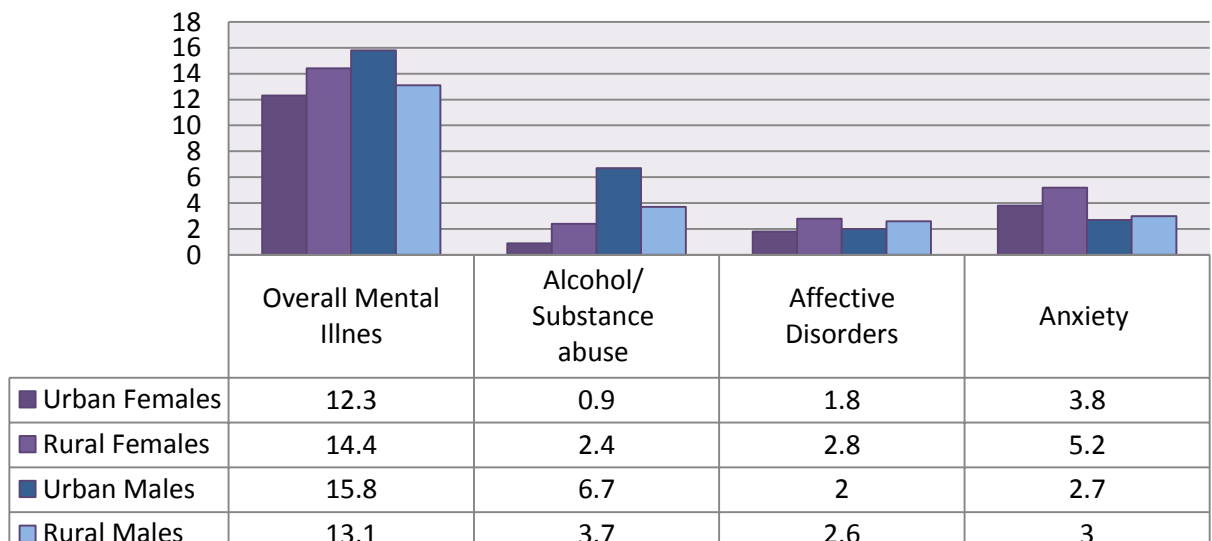


Age-Adjusted Rates per 100,000 Residents

compared with 29.1 in urban Missouri.<sup>7</sup>

- Women can experience Postpartum Depression (PPD), often associated with IPV, traumatic and financial stress during pregnancy, and delivering a low birth weight infant.<sup>8</sup>
- Approximately 1 in 4 women develop depression during their lifetime. Depression is the leading cause of disease burden among women.<sup>16</sup>
- Many women do not seek treatment due to cost, lack of awareness, not believing that treatment is necessary, lack of time, not knowing where to go for services, and the stigma surrounding mental illness.<sup>16</sup>

**Figure 15. Rate of Mental Illness in Missouri<sup>7</sup>**



Age-Adjusted Rates per 10,000 Residents



## Women and Cancer

- Between the years of 2007 and 2011 there were 5,927 breast cancer diagnoses in rural Missouri as compared with 2,809 in urban counties. Figure 16 displays incidence rates per county.<sup>15</sup>
- The rate of rural Missouri females who died due to a type of cancer (158.9) is higher when compared with urban Missouri females (152.5) per 100,000 age-adjusted residents.<sup>7</sup>
- In Missouri, breast cancer *cases* have a higher rate than lung cancer (149 vs 63.3) however, lung cancer *deaths* in women have a higher rate than breast cancer (45.7 vs 25.1) (Figure 19).<sup>5</sup>

Figure 16. Annual Incidence Rates for Breast Cancer by County<sup>15</sup>

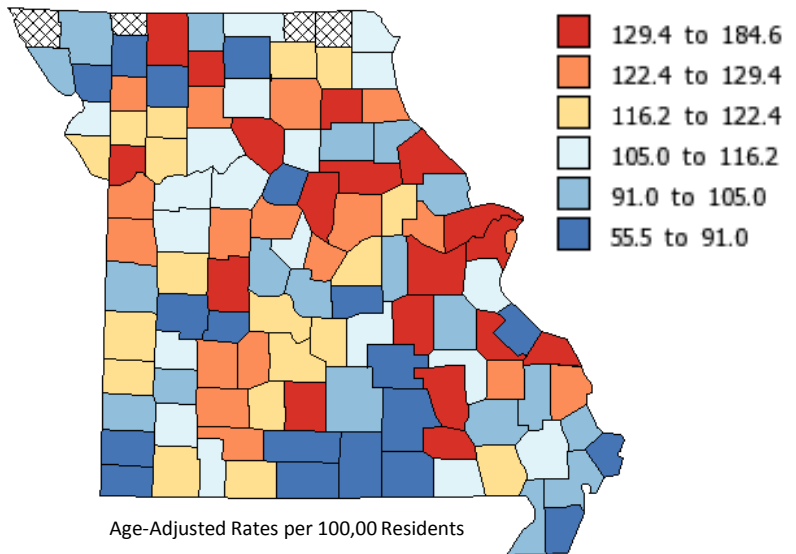


Figure 17. Rates of Getting Breast Cancer by State<sup>1</sup>

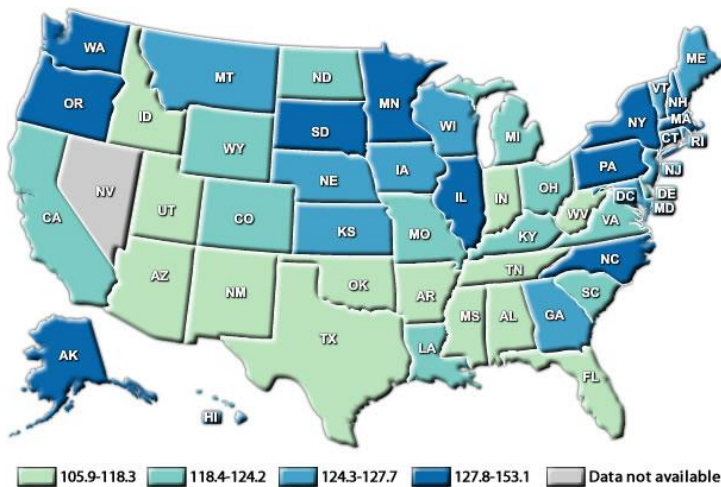
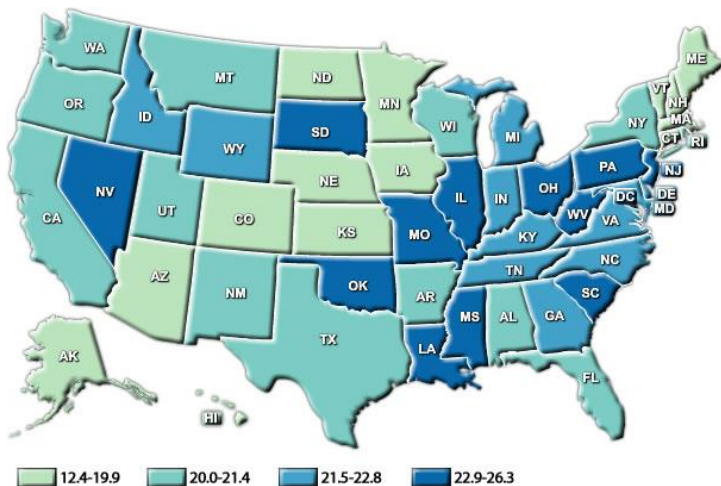
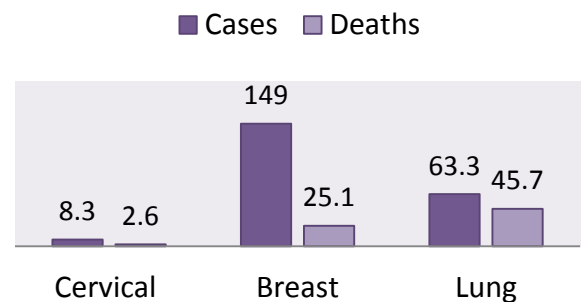


Figure 18. Deaths from Breast Cancer by State<sup>1</sup>



- The rate of women in Missouri getting breast cancer is 118.4-124.2 (second lowest rate), however, the rate of women in Missouri dying from breast cancer is 22.9-26.3 (highest rate) per 100,000 women (Figures 17,18).<sup>1</sup>
- A significantly larger proportion of all Missouri females than males (9.5% vs. 5.7%) have reported a previous diagnosis of cancer.<sup>15</sup>
- In 2012, men in Missouri had a higher rate of cancer death as a whole than women (217.3 vs 154.9) per age-adjusted 100,000 residents. .<sup>7</sup>
- Barriers such as distance from screening location, limited hours of operation, lack of daycare for children, and out-of-pocket costs, can make it difficult for people in rural Missouri to seek screening for cancer.<sup>16</sup>

Figure 19. The Rate of Morbidity and Mortality of Certain Cancers in Missouri Women<sup>5</sup>

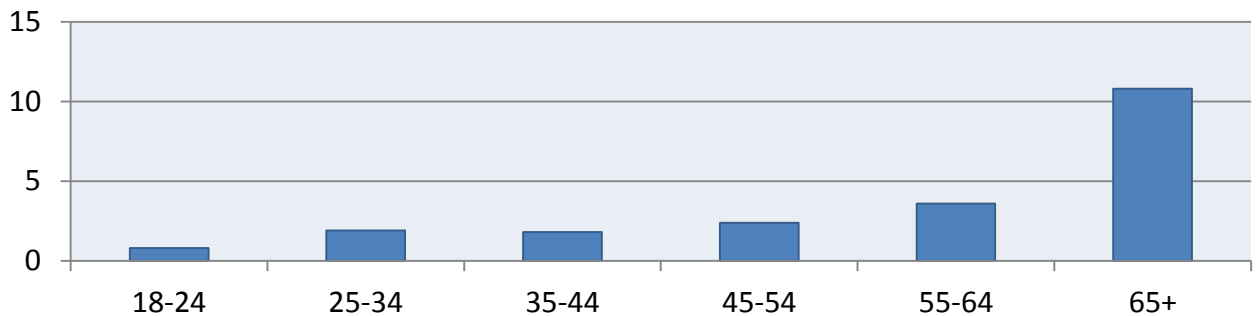


Age-Adjusted Rates per 100,000 Residents

## Elderly and Aging Issues

- Rural Missouri females are older than urban Missouri females and rural and urban males.<sup>6</sup>
- In the 85+ category in Missouri, the female-to-male ratio is 2:1.<sup>6</sup>
- 27% of Missourians age 65+ did not receive medical care in the past 12 months due to cost.<sup>5</sup>
- 10.8% of Missourians age 65+ did not receive medical care in the past 12 months due to a lack of transportation. This percentage is much higher than the younger age groups (Figure 20). The percent of Missouri women who did not have adequate transportation for medical purposes is 3.2% as compared with 1.6% of men.<sup>5</sup>
- Health issues that affect ability to drive limit access to medical care, especially in rural areas. The elderly in rural areas have less access to health information and literature due to limited technology and internet. This results in a decreased understanding of health risks.<sup>16</sup>

**Figure 20. Age of Missouri Residents Who Did Not Get Needed Medical Attention Due to a Lack of Transportation (%)<sup>5</sup>**



## Women Taking Action

Missouri has a variety of programs established to assist women in making informed decisions about their health and increasing their access to preventative, primary and specialist care. Listed below are a few options women in Missouri currently have. These particular programs are tailored toward women who are high risk and have limited access to health services, encompassing much of the rural population.

### **Show Me Healthy Women (SMHW)**

This is a free cervical and breast cancer screening program for high risk, qualified women in Missouri. To qualify, women must meet certain income, age, and insurance guidelines. There are 164 facilities throughout Missouri offering this free service. The list can be retrieved on the Missouri Department of Health and Senior Services under Show Me Healthy Women.<sup>9</sup>

### **WISEWOMAN**

This program provides stroke and heart disease prevention education and screenings to the clients of the SMHW program. WISEWOMAN measures blood pressure, cholesterol, HDL, blood glucose and height and weight. Health assessments aid in identifying unhealthy lifestyle habits and direct risk counseling.<sup>11</sup>

### **Uninsured Women's Health Services Program**

This program through MO HealthNet provides women's health services to women over the age of 18 who do not have insurance and whose family modified income does not exceed 201% of the federal poverty level for their household size. Information can be obtained through the Missouri Department of Social Services.<sup>13</sup>

### **Missouri Coalition Against Domestic & Sexual Violence**

This coalition provides education, assistance, alliance, and research in the areas of domestic, sexual, and dating violence, and stalking.<sup>3</sup>



## Sources

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